REMARKS

The Office Action of November 7, 2006 has been carefully reviewed.

The Applicant believes that the Examiner has misunderstood the Applicant's arguments with respect to Fullam.

The present claims require that the processing unit (1) execute a bootstrap program to select between <u>different external memory</u> set up data, and (2) that this bootstrap program function be performed <u>without access to external memory</u>. It is in this context of determining memory type without access to external memory, as claimed, that <u>Fullam</u>: (1) does not select between different types of memory types but always assumes a universal memory standard, and (2) does not use the parameter memory 54 for temporary storage.

The Examiner notes that <u>Fullam</u> is supposed to work with different types of memory and the Applicant agrees. But <u>Fullam</u> only determines the type of external memory connected to the processing unit after the processing unit is connected to the external memory and can use it to run a bootstrap program, not before the processing unit is connected to external memory.

Fullam solves the problem of communicating with external memory before the type of external memory is determined, by using a default mode of communication with external memory that is universal to all the memory types that Fullam may use. See generally, column 7, lines 30-31 which note that on power-up, the processing unit "reads data from the ROM in the standard, low-speed mode of operation". Column 7, lines 31-36 further notes that "the contents of the parameter memory 54 may be such that the variable-parameter controller 56 interfaces with the peripheral memory device 58 in [a] standard mode of operation as a default." Thus, Fullam is clearly communicating with the external memory before the type of external memory is determined. It follows that Fullam cannot satisfy the limitations of the claims to "select

between different external memory set-up data needed to communicate with different types of external memory...without access to external memory" because external memory is accessed before the type of external memory is known.

The Examiner is correct that the parameter memory 54 is not a read-only memory as supposed by the Applicant. As the Examiner notes, the contents of the parameter memory 54 may be adjusted once the configuration data for the external memory is determined. See column 7, lines 43-49. Nevertheless, the contents of parameter memory 54 clearly are not changed before external memory is accessed as required by the present claims, but only after the external memory has been accessed using the standard default mode. Thus Fullam fails to teach the limitation of the claims that the processing unit executes the bootstrap program to determine memory type using "internal system storage structure for temporary storage without access to external memory". Fullam uses the parameter memory for storage, but only after it has accessed external memory.

Further, while the Examiner is correct that Fullam does, in fact, write to the parameter memory 54, it is only writing memory configuration data to the parameter memory and clearly does not meet the claim limitation of "execut[ing] at least a portion of a bootstrap program...using the at least one internal system storage structure for temporary storage." The parameter memory 54 is clearly not required for the execution of a bootstrap program because the bootstrap program has access to external memory immediately.

It is believed that the Examiner can appreciate from this discussion that the Applicant's previous distinguishing remarks where intended to be read in the context of the other language of the claims and not as if they were the sole elements of the claim. Now that the context of these remarks is explained, it is hoped that the distinction between the present invention and Fullam is

Serial No. 10/083,814 Reply to Office Action of November 7, 2006 Page 9 of 9

clear

Fundamentally, Fullam provides no indication as to how a processing unit can communicate with a wide range of different types of external memory before having access to that memory. Fullam's solution is to limit the types of different memory to those which can all communicate using a standard memory configuration. This teaches away from the present invention which can execute a bootstrap program to determine the type of external memory attached to the processing unit even before that memory can be accessed and even if that memory does not conform to a single default standard.

In light of these comments it is hoped that the rejection of the claims is reconsidered and that claims 1-23 as currently amended will be allowed.

Respectfully submitted,

JOSEPH FRANCIS MANN, et al.

Keith M. Baxter Reg. No. 31,233 Attorney for Applicant Boyle Fredrickson Newholm

Stein & Gratz, S.C. 250 E. Wisconsin Avenue, #1030 Milwaukee WI 53202

(414) 225-9755